Iowa Department of Natural Resources
Environmental Protection Commission

ITEM **9** **DECISION**

TOPIC **Notice of Intended Action:** Chapters 20, 22, 23, **Air Quality Program Rules – Permitting Rules for Grain Elevators**

The Department is requesting permission from the Commission to proceed with the rulemaking process and publish a Notice of Intended Action to amend Chapter 20, "Scope of Title—Definitions—Forms—Rules of Practice," Chapter 22, "Controlling Pollution," and Chapter 23, “Emission Standards for Contaminants” of the 567 Iowa Administrative Code.

The purpose of the proposed rule changes is to establish new air quality rules for grain elevators and feed mills. The proposed rulemaking adds new rule 567—22.10(455B) with special requirements for these facilities. The proposed rule defines each type of facility, and also specifies for each type of facility the permitting options, emissions calculation methodology, emissions reporting and record keeping, and best management practices for controlling air pollution. A new particulate matter emission standard will also be established for bin vents located at country grain elevators through amendments to subrule 23.4(7).

In 1978, the Sixty-Seventh Iowa General Assembly limited the Department's ability to regulate country grain elevators. Since that time, the Department has not enforced the requirement that the owner or operator of a grain elevator obtain air construction permits. However, the passage of the 1990 amendments to the federal Clean Air Act (CAA) created a new operating permit program for major sources of regulated air pollutants. As a result, the U.S. Environmental Protection Agency (EPA) required that the restrictions limiting the regulation of grain elevators be removed to allow Iowa to have a federally approved operating permit program. The Iowa General Assembly subsequently removed these restrictions in 1995, and EPA granted federal approval of Iowa's operating permit program in 1995. Removal of the restrictions necessitated that the Department review and permit air emissions at hundreds of grain elevators to bring them into compliance with the air construction permitting requirements of rule 567—22.1(455B).

In an effort to minimize the regulatory burden to the owners or operators of grain elevators while still ensuring that Iowa's air quality is protected, the Department began working with the Agribusiness Association of Iowa (AAI) to develop a streamlined mechanism for permitting. Facility information from amnesty registrations, along with information received through an unofficial survey of the permitting requirements for grain elevators in surrounding states, assisted the Department and the work group in developing a permitting strategy.

The proposed amendments allow grain elevators in Iowa to be regulated in a manner similar to that of surrounding states and splits the grain elevator source sector into four groups characterized by their potential to emit for particulate matter with a diameter less than or equal to 10 microns (PM10). Regardless of the individual grain elevator's emissions, the Department is requiring that an owner or operator of a grain elevator apply best management practices (BMP) and comply with the fugitive dust standard. The Department is also requiring that an owner or operator of a grain elevator comply with the emissions controls specified in required construction permits. Application of BMP and the emissions

control specified in the required construction permits will serve to protect the ambient air, and will minimize the impact of emissions from each facility.

The Department has always required that feed mills obtain construction permits. Through the workgroup proceeding, the Department learned that many grain elevators are located with feed mills. With the exception of feed mills located at a country grain elevator, all feed mills are considered to be part of grain processing, which is not included in this rule proposal. Owners and operators of these feed mills are required to obtain construction permits for all feed mill and supporting grain storage equipment. The Department is requiring that an owner or operator of a feed mill that is located with a country grain elevator obtain construction permits for each piece of air emitting equipment located at the feed mill. Permitting requirements for the country grain elevator portion of the facility would be based on the PTE of PM10 from the grain storage equipment.

The owner or operator of an existing grain elevator must submit the appropriate registration form or permit application by March 31, 2008. The owner or operator for a new grain elevator must apply for and obtain the appropriate registration or permit prior to initiating construction of air emissions equipment.

This proposed rule amends subrule 23.4(7) to specify a new particulate matter emission limit for bin vents located at country grain elevators. The majority of the country grain elevator bin vents have been operated uncontrolled since the bins were constructed. Emissions from country grain elevator bin vents were never identified as causing or contributing to past particulate matter nonattainment areas, and the state is currently in attainment for the PM10 National Ambient Air Quality Standards (NAAQS). Available particulate matter emissions testing data reviewed by the Department for country grain elevator bin vents indicates that a representative level of uncontrolled particulate matter emissions from a grain elevator bin vent is 1.0 grain per dry standard cubic foot of exhaust gas. Country grain elevator bin vent emissions at this emissions level result in low PM10 emissions since bin vents are operated (turned over) infrequently. Based on these considerations, the Department believes that changing the particulate matter emission level from 0.1 grain per dry standard cubic foot of exhaust gas to 1.0 grain per dry standard cubic foot of exhaust gas will have no adverse impact on air quality and will allow the facility owner or operator to focus resources on the implementation of BMP on emission units that will result in a positive impact on air quality.

If the Commission approves this Notice of Intended Action, the Department will hold three combined informational meetings and three public hearings regarding this rulemaking. An informational meeting, followed immediately by a public hearing, will be held on Monday, September 24, 2007, at 1 p.m. in the conference rooms at the Department's Air Quality Bureau located at 7900 Hickman Road, Urbandale, Iowa. A second informational meeting, followed immediately by a public hearing, will be held on Wednesday, September 26, 2007, at 1 p.m. in the Amana Room at Kirkwood Community College in Cedar Rapids, Iowa. A third informational meeting, followed immediately by a public hearing, will be held on Monday, October 1, 2007, at 1 p.m. at Iowa Lakes Community College, Gateway North Center, 1900 North Grand Avenue, in Spencer, Iowa. All comments must be received no later than October 2, 2007.

An administrative rule fiscal impact statement is attached.

Jim McGraw
Environmental Program Supervisor
Program Development Section, Air Quality Bureau
Memo date: July 9, 2007

ENVIRONMENTAL PROTECTION COMMISSION [567]

Notice of Intended Action

Pursuant to the authority of Iowa Code section 455B.133, the Environmental Protection Commission hereby gives Notice of Intended Action to amend Chapter 20, "Scope of Title—Definitions—Forms—Rules of Practice," Chapter 22, "Controlling Pollution," and Chapter 23, “Emission Standards for Contaminants” of the Iowa Administrative Code.

The purpose of the proposed rule changes is to establish new air quality rules and clarify existing rules for grain elevators and feed mills. The proposed rulemaking defines each type of facility, and also specifies for each type of facility the permitting options, emissions calculation methodology, emissions reporting and record keeping, and best management practices for controlling air pollution. A new particulate matter emissions standard will also be established, through amendments to subrule 23.4(7), for bin vents located at country grain elevators.

In 1978, the Sixty-Seventh Iowa General Assembly limited the Department's ability to regulate country grain elevators [1978 Iowa Acts, Chapter 1004, Section 17]. Since that time, the Department has not enforced the requirement that the owner or operator of a country grain elevator obtain air construction permits. However, the passage of the 1990 amendments to the federal Clean Air Act (CAA) created a new operating permit program for major sources of regulated air pollutants. As a result, the U.S. Environmental Protection Agency (EPA) required that the restrictions limiting the regulation of country grain elevators be removed to allow Iowa to have a federally approved operating permit program. In 1995, The Iowa General Assembly subsequently removed these restrictions [1995 Iowa Acts, Chapter 2, Section 2], and EPA granted federal approval of Iowa's operating permit program in 1995. Removal of the restrictions

necessitated that the Department review and permit air emissions at hundreds of country grain elevators and other, similar facilities to bring them into compliance with the air construction permitting requirements of rule 567—22.1(455B).

In an effort to minimize the regulatory burden to the owners or operators of country grain elevators while still ensuring that Iowa's air quality is protected, the Department began working with the Agribusiness Association of Iowa (AAI) to develop a streamlined mechanism for permitting. During this process, the Department discovered that more information about the grain elevator source sector in Iowa was needed to better characterize air emissions equipment and the typical operating limitations at grain elevators. This need, combined with the on-going uncertainty about the air quality compliance status of each individual facility, resulted in a Departmental amnesty program for grain elevators.

The Department began the amnesty program in August 2003, asking grain elevator owners and operators to complete a registration form. Submittal of the registration form granted a facility temporary amnesty from the requirement to obtain a construction permit and temporary amnesty from the emission limits for particulate matter specified in rule 567—23.4(455B). Through the amnesty program, the Department received detailed information regarding each facility’s grain throughput and the grain storage capacities and types of air emissions equipment located at each facility. In total, 838 facilities registered for the amnesty program.

Facility information from the amnesty registrations, along with information received through an unofficial survey of the permitting requirements for grain elevators in surrounding states, assisted the Department and the work group in developing a permitting strategy.

The proposed amendments allow grain elevators in Iowa to be regulated in a manner similar to that of surrounding states. Regardless of the individual grain elevator's emissions, the

Department is requiring that an owner or operator of a grain elevator apply best management practices (BMP) and comply with the fugitive dust standard. The Department is also requiring that an owner or operator of a grain elevator comply with the emissions controls specified in required construction permits. Application of BMP and the emissions control specified in the required construction permits will serve to protect the ambient air, and will minimize the impact of emissions from each facility. This includes reducing the presence of fugitive dusts, which have occasionally been a problem at even some of the smaller grain elevators.

Of the 838 facilities submitting registrations for the amnesty program, 793 registrations were for country grain elevators, while 45 of the registrations were for grain terminal elevators. Equipment information for other types of grain elevators and associated processes such as feed mills and grain storage elevators also were included with some of the registrations submitted.

The regulatory strategy encompassed in the amendments proposed in Item 5 minimizes the burden to the owners or operators of a the most common types of grain elevators in the state, while allowing the Department to focus its permitting and compliance resources on the facilities with emissions that are likely to have the greatest potential to impact human health and the environment.

Item 1 amends the definition of "country grain elevator" in rule 567—20.2(455B) to refer to the definition of "country grain elevator" in new subrule 22.10(1).

Item 2 adds definitions for "grain processing" and "grain storage elevator" to rule 567—20.2(455B). The definition of "grain storage elevator," is derived from the definition contained in the federal new source performance standards (NSPS) for grain elevators contained in 40 Code of Federal Regulations (CFR) Part 60, Subpart DD. The Department included additional language in the definition to better distinguish grain storage elevators from other types of grain

elevators. The definition for "grain processing" was developed by Department staff in conjunction with workgroup members, and is based on definitions used in nearby states. This definition is being added because the owner or operator of equipment at a grain processing facility is not eligible to use the proposed rules for grain elevators.

Item 3 amends the definition of "potential to emit" in rule 567—20.2(455B) to refer to the method for calculating potential to emit at country grain elevators as specified in new subrule 22.10(2).

Item 4 amends subrule 22.1(1) to add new paragraph "d," specifying that alternative permitting requirements for country grain elevators, country grain terminal elevators, feed mills and grain terminal elevators are set forth in rule 567—22.10(455B).

Item 5 adds new rule 567—22.10(455B) establishing air quality rules for grain elevators that are classified as country grain elevators, country grain terminal elevators, and grain terminal elevators. The new rule also includes the permitting requirements for a feed mill that is located at a country grain elevator.

Grain processing plants and grain storage elevators are not eligible to use the provisions set for forth in rule 567—22.10(455B). The Department has always required that an owner or operator of a grain processing facility obtain air construction permits for all equipment at the facility. This is because grain processing facilities may emit air pollutants at levels classifying them as major stationary sources for the Prevention of Significant Deterioration (PSD) program and for the Title V operating permit program. Equipment at grain processing facilities also may be subject to federal new source performance standards (NSPS) and national emission standards for hazardous air pollutants (NESHAP). Grain storage elevators are part of the grain processing

operations at grain mills and soybean oil extraction plants, and may be subject to federal NSPS. Grain storage elevators are not eligible to use the provisions set forth in rule 567—22.10(455B).

With the exception of feed mills located at a country grain elevator, all feed mills are considered to be part of grain processing, which is not included in this rule proposal. Owners and operators of these feed mills are required to obtain construction permits for all feed mill and supporting grain storage equipment.

Rule 567—22.10(455B) contains four subrules specifying air quality requirements. The definitions applicable to rule 567—22.10(455B) are set forth in subrule 22.10(1). The methods for determining the potential emissions of particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM10) are set forth in subrule 22.10(2). Subrule 22.10(3) sets forth the provisions for grain elevator classification and the requirements for permits, emissions control, record keeping and reporting. Subrule 22.10(4) contains the permitting requirements for feed mills that are located at country grain elevators.

The definition of "country grain elevator" is similar to the definition that is contained in existing rules 567—20.2(455B) and 567—22.100(455B).The Department is revising the definition to better distinguish country grain elevators from other types of grain elevators.

The definition of "country grain terminal elevator" was developed by Department staff to cover grain elevators with operations that are similar to both country grain elevators and grain terminal elevators, but that do not fall into either category.

The definition of "feed mill" was developed by Department staff to apply to feed mill equipment that is located at a country grain elevator. A feed mill that is not located at a country grain elevator is considered to be part of grain processing and is not included under rule 567—22.10(455B).

The definition of "grain" is the definition contained in Iowa Code 203.1(9), which states that "grain" means any grain for which the United States department of agriculture has established standards including, but not limited to, corn, wheat, oats, soybeans, rye, barley, grain sorghum, flaxseeds, sunflower seed, spelt (emmer), and field peas.

The definition of "grain processing" refers to the definition specified in the amendments to 567—20.2(455B).

The definition of "grain storage elevator" refers to the definition specified in the amendments to 567—20.2(455B).

The definition of "grain terminal elevator," incorporates the definition in the grain elevator NSPS (40 CFR Part 60, Subpart DD). The Department is revising the definition to better distinguish grain terminal elevators from other types of grain elevators.

The definition for "permanent storage capacity" is taken from the grain elevator NSPS (40 CFR Part 60, Subpart DD).

Subrule 22.10(2) specifies the methods for determining the potential to emit (PTE) of PM10 at country grain elevators, country grain terminal elevators, feed mills and grain terminal elevators.

The method specified by the Department and in state rule for calculating potential emissions at country grain elevators was first published in a 1995 EPA memorandum, and takes into account the seasonal throughput of country grain elevator operations. The Department has accepted the use of the EPA-developed calculation to determine PTE since 1995. The calculation method specified in this amendment also allows country grain elevators to account for additional control of PM and PM10 emissions through Best Management Practices (BMP) and other

emissions control measures established in a registration or in a permit issued pursuant to subrule 22.10(3).

The proposed rule also stipulates that grain terminal elevators, country grain terminal elevators and feed mills shall calculate their PTE as set forth in the definition of "potential to emit" in rule 567—20.2(455B).

Some grain terminal elevators are subject to federal NSPS and have PTEs that trigger both construction and operating permitting requirements. Based on these considerations, the Department is clarifying that an owner or operator of a grain terminal elevator must calculate the PTE for each piece of emissions equipment at the facility (grain terminal elevators may not use the special facility-wide PTE calculation allowed for country grain elevators). For purposes of determining applicability for the PSD and Title V programs, fugitive emissions at sources with grain terminal elevators also must be included in PTE calculations.

The Department is aware of a small number of facilities that operate similarly to both country grain elevators and grain terminal elevators, but that do not fall into either category. This type of a facility is termed "country grain terminal elevator" in the proposed rules. Because the operations and emissions at these country grain terminal elevators appear to be similar to grain terminal elevators, country grain terminal elevators also must calculate the PTE for each piece of emissions equipment at the facility.

The Department has always required an owner or operator of a feed mill to calculate the PTE for each piece of emissions equipment at the facility.

Subrule 22.10(3) contains the requirements for construction permits, operating permits, emissions control, record keeping and reporting at country grain elevators, country grain terminal elevators and grain terminal elevators.

The Department estimated the grain elevators' PTE for PM10 using the information submitted on the amnesty registration forms. The Department then used the emissions thresholds typically used for permitting grain elevators in surrounding states, and split the grain elevator source sector into four groups characterized by their PTE for PM10. The PTE thresholds that trigger specific requirements are set at 15, 50, and 100 tons per year (tpy), as illustrated in the following table.

Grain Elevator Group	PM10 PTE (tons per year)
Group 1	<15
Group 2	≥15 and ≤ 50
Group 3	> 50 and < 100
Group 4	≥ 100

The requirements for permitting, emissions control, and emissions reporting and record keeping requirements increase for facilities with a greater PTE.

Country grain elevators, country grain terminal elevators and grain terminal elevators in the lowest PTE group, termed "Group 1" in the above table and in the proposed rule, are exempt from the requirement to obtain a construction permit. However, the owner or operator of a Group 1 facility is required to submit a registration and PTE calculations on forms supplied by the Department, certifying that the facility's PTE for PM10 is less than 15 tpy. Additionally, the owner or operator of a Group 1 facility is required to use BMP for controlling air pollution and for limiting fugitive dust from crossing the property line.

The owner or operator of a country grain elevator, country grain terminal elevator or grain terminal elevator qualifying for the Group 2 category may use a Group 2 permit application for grain elevators on forms provided by the Department in lieu of obtaining a regular construction permit. The Group 2 permit for grain elevators is a combined permit application and

permit that is specific for grain elevators that meet the eligibility criteria for Group 2 facilities. The Group 2 permit application for grain elevators should be easier for an owner or operator to complete than a regular construction permit application, and is expected to streamline the permit application process for eligible facilities.

The Group 2 permit for grain elevators will specify that the owner or operator of a Group 2 facility must oil their grain, or otherwise achieve facility-wide PM10 emissions reductions that are equivalent to the reductions achieved through grain oiling. Additionally, the owner or operator of a Group 2 facility must: apply BMP; keep a record of the total, annual grain handled in the past five years; and calculate their annual PTE for PM10. A Group 2 facility owner or operator also must submit emissions inventories to the Department as specified in subrule 21.1(3).

An owner or operator of a country grain elevator, country grain terminal elevator or grain terminal elevator that is a Group 3 facility is required to apply for and obtain air construction permits. The construction permits for these facilities may contain requirements for the installation of emissions controls which may include grain oiling or equivalent measures to meet applicable air quality emission and ambient air quality standards. Because the PTE for particulate matter (PM) may exceed the PTE for PM10, Group 3 facilities may potentially have a PTE for PM that is greater than or equal to 250 tons per year. Facilities with a PTE for PM or PM10 that is greater than or equal to 250 tons per year are considered to be major stationary sources for the PSD program. As such, the owner or operator of a Group 3 facility is required to calculate their PTE for both PM and PM10 to ensure that annual emissions for both pollutants are less than 100 tons. An owner or operator of a Group 3 facility also must submit emissions inventories to the Department as specified in subrule 21.1(3).

The owner or operator of a country grain elevator, country grain terminal elevator or grain terminal elevator that is a Group 4 facility must; apply for construction permits, as applicable; apply for an operating permit, as applicable; and must submit annual emissions inventories to the Department reporting all regulated air pollutants. The construction and operating permits for these facilities may contain requirements for installation of emissions controls, which may include grain oiling or equivalent measures, to meet applicable air quality standards.

The permitting, emissions control, recordkeeping and reporting requirements of each of the four groups apply even if a country grain elevator, country grain terminal elevator or grain terminal elevator did not register for the amnesty program. These requirements apply to both new and existing facilities. The owner or operator of an existing facility must submit the appropriate registration form or permit application by March 31, 2008. The owner or operator for a new facility must apply for and obtain the appropriate registration or permit prior to initiating construction of air emissions equipment.

The Department is aware that a limited number of facilities may exist that do not meet the definition of "country grain elevator," "country grain terminal" or "grain terminal elevator." The Department currently does not have enough information on the equipment and associated air emissions at these other types of grain elevators. As such, owners or operators of these other types of grain elevators are not eligible to use the alternative provisions in the proposed rules for country grain elevators, country grain terminal elevators, and grain terminal elevators.

Subrule 22.10(4) sets forth the permitting provisions for feed mills that are located at country grain elevators. The Department has always required that feed mills obtain construction permits. However, through the amnesty program and workgroup proceedings, the Department

learned that a number of feed mills are located at country grain elevators, and that the owners and operators of these feed mills may not have obtained the required construction permits. The provisions set forth in subrule 22.10(4) provide an opportunity for the owners and operators of feed mills that are located at country grain elevators to apply for the required construction permits, and, if applicable, to comply with the requirements under the PSD and operating permit programs.

Item 6 amends the definition of "country grain elevator" in rule 567—22.100(455B) to refer to the definition of "country grain elevator" in new rule 567—22.10(455B).

Item 7 amends the definition of "potential to emit" in rule 567—22.100(455B) to refer to the method for calculating potential to emit for country grain elevators as specified in new subrule 22.10(2).

Item 8 amends the subrule 23.4(7) to specify a new particulate matter emission limit for bin vents located at country grain elevators.

The Department's August 2003 amnesty program included temporary amnesty from the emission limits for particulate matter specified in rule 567—23.4(455B). Bin vent information obtained from the facilities that registered for the amnesty indicated that the majority of the country grain elevator bin vents have been operated uncontrolled since the bins were constructed. Emissions from country grain elevator bin vents were never identified as causing or contributing to past particulate matter nonattainment areas. The state is currently in attainment for the PM10 National Ambient Air Quality Standards (NAAQS).

Available particulate matter emissions testing data reviewed by the Department for country grain elevator bin vents indicates that a representative level of uncontrolled particulate matter emissions from a grain elevator bin vent is 1.0 grain per dry standard cubic foot (gr/dscf)

of exhaust gas. Country grain elevator bin vent emissions at this emissions level result in low PM10 emissions since bin vents are operated only on a periodic basis. Based on these considerations, the Department believes that changing the particulate matter emission level for bin vents at country grain elevators from 0.1 gr/dscf to 1.0 gr/dscf of exhaust gas will have no adverse impact on air quality. This amendment will allow the facility owner or operator to focus resources on the implementation of BMP on emission units that will result in a positive impact on air quality.

Any person may make written suggestions or comments on the proposed amendments on or before October 2, 2007. Written comments should be directed to Christine Paulson, Department of Natural Resources, Air Quality Bureau, 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322; fax (515) 242–5094; or by electronic mail to christine.paulson@dnr.state.ia.us.

The Department will hold three informational meetings and three public hearings regarding this rulemaking. At the informational meeting, department staff will be available to answer questions on the proposed amendments. At the public hearings, comments on the proposed amendments may be submitted orally or in writing.

An informational meeting, followed immediately by a public hearing, will be held on Monday, September 24, 2007, at 1 p.m. in the conference rooms at the Department's Air Quality Bureau located at 7900 Hickman Road, Urbandale, Iowa. A second informational meeting, followed immediately by a public hearing, will be held on Wednesday, September 26, 2007, at 1 p.m. in the Amana Room at Kirkwood Community College in Cedar Rapids, Iowa. A third informational meeting, followed immediately by a public hearing, will be held on Monday, October 1, 2007, at 1 p.m. at Iowa Lakes Community College, Gateway North Center, 1900

North Grand Avenue, in Spencer, Iowa. All comments must be received no later than October 2, 2007.

Any person who intends to attend the public hearings and has special requirements, such as those related to hearing or mobility impairments, should contact Christine Paulson at (515) 242–5154 to advise of any specific needs.

These amendments are intended to implement Iowa Code section 455B.133.

The following amendments are proposed.

ITEM 1. Amend rule **567—20.2(455B)**, the definition for "country grain elevator," as follows:

"Country grain elevator" ~~means any grain elevator that receives more than 50 percent of its grain, as defined by 40 CFR 60.301(a) as amended through August 3, 1978, produced by farms in the vicinity. This definition does not include grain terminal elevators or grain storage elevators, as defined in paragraph 23.1(2)"ooo."~~ shall mean the definition of "country grain elevator" set forth in paragraph 22.10(1)"a."

ITEM 2. Amend rule **567—20.2(455B)**, to add the following **new** definitions in alphabetical order:

"Grain storage elevator" means any plant or installation at which grain is unloaded, handled, cleaned, dried, stored, or loaded and the plant or installation is located at any wheat flour mill, wet corn mill, dry corn mill (human consumption), rice mill, or soybean oil extraction plant which has a permanent grain storage capacity (grain storage capacity which is inside a building, bin, or silo) of more than 35,200 m^3 (ca. 1 million U.S. bushels).

"Grain processing" means the equipment, or the combination of different types of equipment, used in the processing of grain to produce a product primarily for wholesale or retail sale for human or animal consumption, including the processing of grain for production of biofuels, except for equipment located at a "feed mill," as "feed mill" is defined in rule 567—22.10(455B).

ITEM 3. Amend rule **567—20.2(455B)**, the definition for "potential to emit," **first** and **second paragraphs**, as follows:

"Potential to emit" means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is enforceable by the administrator. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations relating to acid rain.

For the purpose of determining potential to emit for country grain elevators, ~~"maximum capacity" means the greatest amount of grain received by the elevator during one year of the previous five-year period, multiplied by an adjustment factor of 1.2. If the source is subject to new source construction permit review, then potential to emit is defined as stated above or as established in a federally enforceable permit.~~ the provisions set forth in subrule 22.10(2) shall apply.

ITEM 4. Amend subrule 22.1(1) to add **new** paragraph "d," as follows:

d. Permit requirements for country grain elevators, country grain terminal elevators, feed mills and grain terminal elevators. The owner or operator of a country grain elevator, country grain terminal elevator, feed mill or grain terminal elevator, as these terms are defined in subrule 22.10(1), may elect to comply with the requirements specified in rule 567—22.10(455B) for equipment at these facilities.

ITEM 5. Adopt the following **new** rule 567—22.10(455B) as follows:

567—22.10(455B) Permitting requirements for country grain elevators, country grain terminal elevators, feed mills and grain terminal elevators. The requirements of this rule apply only to country grain elevators, country grain terminal elevators, feed mills and grain terminal elevators, as these terms are defined in subrule 22.10(1). The requirements of this rule do not apply to equipment located at grain processing plants or grain storage elevators, as "grain processing" and "grain storage elevator" are defined in rule 567—20.2(455B). Compliance with the requirements of this rule does not alleviate any affected person's duty to comply with any applicable state or federal regulations. In particular, the emission standards set forth in 567 IAC Chapter 23, including the regulations for grain elevators contained in 40 CFR Part 60, Subpart DD (as adopted by reference in paragraph 23.1(2)"ooo") may apply.

22.10(1) Definitions. For purposes of rule 567—22.10(455B), the following terms shall have the meanings indicated in this subrule.

a. "Country grain elevator" means any plant or installation at which grain is unloaded, handled, cleaned, dried, stored, or loaded and meets the following criteria:

- receives more than fifty (50) percent of its grain, as "grain" is defined in this subrule, from farmers in the immediate vicinity during harvest season;

- is not located at any wheat mill, wet corn mill, dry corn mill (human consumption), rice mill, or soybean oil extraction plant.

b. "Country grain terminal elevator" means any plant or installation at which grain is unloaded, handled, cleaned, dried, stored, or loaded and meets the following criteria:

- receives less than or equal to than fifty (50) percent of its grain, as "grain" is defined in this subrule, from farmers in the immediate vicinity during harvest season;
- has a permanent storage capacity of less than or equal to 2.5 million U.S. bushels, as "permanent storage capacity" is defined in this subrule;
- is not located at any wheat mill, wet corn mill, dry corn mill (human consumption), rice mill, or soybean oil extraction plant.

c. "Feed mill" means any plant or installation with grain processing equipment that is used to make animal feed that includes, but is not limited to, grinders, crackers, hammer mills, and pellet coolers, and is located at a country grain elevator.

d. "Grain," as set forth in Iowa Code, Section 203.1(9), means any grain for which the United States department of agriculture has established standards including, but not limited to, corn, wheat, oats, soybeans, rye, barley, grain sorghum, flaxseeds, sunflower seed, spelt (emmer), and field peas.

e. "Grain processing" means the definition of "grain processing" set forth in rule 567—20.2(455B).

f. "Grain storage elevator" means the definition of "grain storage elevator" set forth in rule 567—20.2(455B).

g. "Grain terminal elevator" means any plant or installation at which grain is unloaded, handled, cleaned, dried, stored, or loaded and meets the following criteria:

- receives less than or equal to than fifty (50) percent of its grain, as "grain" is defined in this subrule, from farmers in the immediate vicinity during harvest season;
- has a permanent storage capacity of more than 88,100 m^3 (2.5 million U.S. bushels), as "permanent storage capacity" is defined in this subrule;
- is not located at an animal food manufacturer, pet food manufacturer, cereal manufacturer, brewery, or livestock feedlot;
- is not located at any wheat mill, wet corn mill, dry corn mill (human consumption), rice mill, or soybean oil extraction plant.

h. "Permanent storage capacity" means grain storage capacity which is inside a building, bin, or silo.

22.10(2) Methods for determining potential to emit (PTE). The owner of operator of a country grain elevator, country grain terminal elevator, grain terminal elevator or feed mill shall use the following methods for calculating the potential to emit (PTE) of particulate matter (PM) and of particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM10).

a. Country grain elevators. The owner or operator of a country grain elevator shall calculate the PTE for PM and PM10 as specified in the definition of "potential to emit" in rule 567—20.2(455B), except that "maximum capacity" means the greatest amount of grain received at the country grain elevator during one calendar twelve-month period of the previous five calendar, twelve-month periods, multiplied by an adjustment factor of 1.2. The owner or operator may make additional adjustments to the calculations for air pollution control of PM and PM10 if

the owner or operator submits the calculations to the department using the PTE calculation tool provided by the department. Credit for the application of some best management practices, as specified in subrule 22.10(3) or in a permit issued by the department, may also be used to make additional adjustments in the PTE for PM and PM10 if the owner or operator submits the calculations to the department using the PTE calculation tool provided by the department.

b. Country grain terminal elevators. The owner or operator of a country grain terminal elevator shall calculate the PTE for PM and PM10 as specified in the definition of "potential to emit" in rule 567—20.2(455B).

c. Grain terminal elevators. For purposes of the permitting and other requirements specified in subrule 22.10(3), the owner or operator of a grain terminal elevator shall calculate the PTE for PM and PM10 as specified in the definition of "potential to emit" in rule 567—20.2(455B). For purposes of determining whether the stationary source is subject to the Prevention of Significant Deterioration (PSD) requirements set forth in 567—Chapter 33, or for determining whether the source is subject to the operating permit requirements set forth in rules 567—22.100(455B) through 567—22.300(455B), the owner or operator of a grain terminal elevator shall include fugitive emissions, as "fugitive emissions" is defined in subrule 33.3(1) and in rule 567—22.100(455B), in the PTE calculation.

d. Feed mills. The owner or operator of a feed mill, as “feed mill” is defined in subrule 22.10(1), shall calculate the PTE for PM and PM10 for the equipment at the feed mill as specified in the definition of "potential to emit" in rule 567—20.2(455B). For purposes of determining whether the source is subject to the Prevention of Significant Deterioration (PSD) requirements set forth in 567—Chapter 33, or for determining whether the stationary source is subject to the operating permit requirements set forth in rules 567—22.100(455B) through 567—

22.300(455B), the owner or operator of a feed mill that is located at a country grain elevator, country grain terminal or grain terminal elevator shall sum the PTE of the feed mill with the PTE of the country grain elevator, country grain terminal elevator or grain terminal elevator.

22.10(3) Classification and requirements for permits, emissions control, record keeping and reporting for Group 1, Group 2, Group 3 and Group 4 grain elevators. The requirements for construction permits, operating permits, emissions control, record keeping and reporting for a stationary source that is a country grain elevator, country grain terminal elevator or grain terminal elevator are set forth in this subrule.

a. Group 1 facilities. A country grain elevator, country grain terminal elevator or grain terminal elevator may qualify as a Group 1 facility if the PTE at the stationary source is less than 15 tons of PM10 per year, as PTE is specified in subrule 22.10(2). For purposes of this paragraph, an "existing" Group 1 facility is one that commenced construction, modification or reconstruction before January 9, 2008. A "new" Group 1 facility is one that commenced construction, modification or reconstruction on or after January 9, 2008.

1) Group 1 registration. The owner or operator of a Group 1 facility shall submit to the department a Group 1 registration, including PTE calculations, on forms provided by the department, certifying that the facility’s PTE is less than 15 tons of PM10 per year. The owner or operator of an "existing" facility shall provide the Group 1 registration to the department on or before March 31, 2008. The owner or operator of a "new" facility shall provide the Group 1 registration to the department prior to initiating construction, modification or reconstruction of air emissions equipment. The registration becomes effective upon the department’s receipt of the signed registration form and the PTE calculations.

1. If the owner or operator registers with the department as specified in this subparagraph, the owner or operator is exempt from the requirement to obtain a construction permit as specified under subrule 22.1(1).

2. Upon department receipt of a Group 1 registration and PTE calculations, the owner or operator is allowed to add, remove and modify the emissions units at the facility without modifying the Group 1 registration, provided that the owner or operator calculates the PTE for PM10 prior to making any additions, removals or modifications to equipment, and only if the facility continues to meet the emission limits and operating limits (including restrictions on material throughput and hours of operation, if applicable, as specified in the PTE of PM10 calculations) specified in the Group 1 registration.

3. If equipment at a Group 1 facility currently has an air construction permit issued by the department, that permit shall remain in full force and effect, and the permit shall not be invalidated by the subsequent submittal of a registration made pursuant to this rule.

2) Best Management Practices (BMP). The owner or operator of a Group 1 facility shall implement best management practices (BMP) for controlling air pollution at the facility and for limiting fugitive dust at the facility from crossing the property line. The owner or operator shall implement best management practices according to the department manual, "Best Management Practices (BMP) for Grain Elevators" (August 2007), adopted by the Commission on November 6, 2007, and adopted by reference herein (available from the department, upon request, and on the department's website at www.iowadnr.com/air/).

3) Record keeping. The owner or operator of a Group 1 facility shall retain a record of the previous five (5) calendar years of total annual grain handled, and shall calculate the facility's potential PM10 emissions annually by January 31 for the previous calendar year. These records

shall be kept on-site for a period of five years, and shall be made available to the department upon request.

4) Emissions increases. The owner or operator of a Group 1 facility shall calculate any emissions increases prior to making any additions, removals or modifications to equipment. If the owner or operator determines that PM10 emissions at a Group 1 facility will increase to 15 or more tons per year, the owner or operator shall comply with the requirements set forth for Group 2, Group 3 or Group 4 facilities, as applicable, prior to making any additions, removals or modifications to equipment.

5) Changes to facility classification or permanent grain storage capacity. If the owner or operator of a Group 1 facility plans to change the facility's operations or increase the facility's permanent grain storage capacity to more than 2.5 million U.S. bushels, the owner or operator, prior to making any changes, shall re-evaluate the facility's classification and the allowed method calculating PTE to determine if any increases to the PTE for PM10 will occur. If the proposed change will alter the facility's classification or will increase the facility's PTE for PM10 such that the facility PTE increases to 15 or more tons per year, the owner or operator shall comply with the requirements set forth for Group 2, Group 3 or Group 4 facilities, as applicable, prior to making the change.

b. Group 2 facilities. A country grain elevator, country grain terminal elevator or grain terminal elevator may qualify as a Group 2 facility if the PTE at the stationary source is greater than or equal to 15 tons of PM10 per year and is less than or equal to 50 tons of PM10 per year , as PTE is specified in subrule 22.10(2.). For purposes of this paragraph, an "existing" Group 2 facility is one that commenced construction, modification or reconstruction before January 9,

2008. A "new" Group 2 facility is one that commenced construction, modification or reconstruction on or after January 9, 2008.

1) Group 2 permit for grain elevators. The owner or operator of a Group 2 facility may, in lieu of obtaining air construction permits for each piece of emissions equipment at the facility, submit to the department a completed Group 2 permit application for grain elevators, including PTE calculations, on forms provided by the department. Alternatively, the owner or operator may obtain air constructions permit as specified under subrule 22.1(1). The owner or operator of an "existing" facility shall provide the appropriate completed Group 2 permit application for grain elevators or the appropriate construction permit applications to the department on or before March 31, 2008. The owner or operator of a "new" facility shall provide the appropriate, completed Group 2 permit application for grain elevators or the appropriate construction permit applications to the department prior to initiating construction, modification or reconstruction of air emissions equipment.

1. Upon the department issuance of a Group 2 permit to a facility, the owner or operator is allowed to add, remove and modify the emissions units at the facility without modifying the Group 2 permit, provided that the owner or operator calculates the PTE for PM10 prior to making any additions, removals or modifications to equipment, and only if the facility continues to meet the emission limits and operating limits (including restrictions on material throughput and hours of operation, if applicable, as specified in the PTE of PM10 calculations) specified in the Group 2 permit.

2. If a Group 2 facility currently has an air construction permit issued by the department, that permit shall remain in full force and effect, and the permit shall not be invalidated by the subsequent submittal of a Group 2 permit application for grain elevators made pursuant to this

rule. However, the owner or operator of a Group 2 facility may request that the department incorporate any equipment with a previously issued construction permit into the Group 2 permit for grain elevators. The department will grant such requests on a case-by-case basis. If the department grants the request to incorporate previously permitted equipment into the Group 2 permit for grain elevators, the owner or operator of the Group 2 facility is responsible for requesting that the department rescind any previously issued construction permits.

2) Best Management Practices (BMP). The owner or operator shall implement BMP, as specified in the Group 2 permit, for controlling air pollution at the source and for limiting fugitive dust at the source from crossing the property line. If the department revises the BMP requirements for Group 2 facilities after a facility is issued a Group 2 permit, the owner or operator of the Group 2 facility may request of the department that the facility's Group 2 permit be modified to incorporate the revised BMP requirements. The department will issue permit modifications to incorporate BMP revisions on a case-by-case basis.

3) Record keeping. The owner or operator of a Group 2 facility shall retain all records as specified in the Group 2 permit.

4) Emissions Inventory. The owner or operator of a Group 2 facility shall submit an emissions inventory for the facility for all regulated air pollutants as specified under subrule 21.1(3).

5) Emissions increases. The owner or operator of a Group 2 facility shall calculate any emissions increases prior to making any additions, removals or modifications to equipment. If the owner or operator determines that potential PM10 emissions at a Group 2 facility will increase to more than 50 tons per year, the owner or operator shall comply with the requirements

set forth for Group 3 or Group 4 facilities, as applicable, prior to making any additions, removals or modifications to equipment.

6) Changes to facility classification or permanent grain storage capacity. If the owner or operator of a Group 2 facility plans to change the facility's operations or increase the facility's permanent grain storage capacity to more than 2.5 million U.S. bushels, the owner or operator, prior to making any changes, shall re-evaluate the facility classification and the allowed method for calculating PTE to determine if any increases to the PTE for PM10 will occur. If the proposed change will increase the facility's PTE for PM10 such that the facility PTE increases to more than 50 tons per year, the owner or operator shall comply with the requirements set forth for Group 3 or Group 4 facilities, as applicable, prior to making the change.

c. Group 3 facilities. A country grain elevator, country grain terminal elevator or grain terminal elevator may qualify as a Group 3 facility if the PTE for PM10 at the stationary source is greater than 50 tons per year, but is less than 100 tons of PM10 per year, as PTE is specified in subrule 22.10(2). For purposes of this paragraph, an "existing" Group 3 facility is one that commenced construction, modification or reconstruction before January 9, 2008. A "new" Group 3 facility is one that commenced construction, modification or reconstruction on or after January 9, 2008.

1) Air construction permit. The owner or operator of a Group 3 facility shall obtain the required construction permits as specified under subrule 22.1(1). The owner or operator of an "existing" facility shall provide the construction permit applications, as specified by subrule 22.1(3,) to the department on or before March 31, 2008. The owner or operator of a "new" facility shall obtain the required permits, as specified by subrule 22.1(1), from the department prior to initiating construction, modification or reconstruction of air emissions equipment.

2) Permit conditions. Construction permit conditions for a Group 3 facility shall include, but are not limited to, the following:

1. The owner or operator shall implement BMP, as specified in the permit, for controlling air pollution at the source and for limiting fugitive dust at the source from crossing the property line. If the department revises the BMP requirements for Group 3 facilities after a facility is issued a permit, the owner or operator of the Group 3 facility may request of the department that the facility's permit be modified to incorporate the revised BMP requirements. The department will issue permit modifications to incorporate BMP revisions on a case-by-case basis.

2. The owner or operator shall retain all records as specified in the permit.

3) Emissions inventory. The owner or operator shall submit an emissions inventory for the facility for all regulated air pollutants as specified under subrule 21.1(3).

4) Changes to facility classification or permanent grain storage capacity. If the owner or operator of a Group 3 facility plans to change its operations or increase the facility's permanent grain storage capacity to more than 2.5 million U.S. bushels, the owner or operator, prior to making any changes, shall re-evaluate the facility classification and the allowed method for calculating PTE to determine if any increases to the PTE for PM10 will occur. If the proposed change will alter the facility's classification or will increase the facility's PTE for PM10 such that the facility PTE increases to greater than or equal to 100 tons per year, the owner or operator shall comply with the requirements set forth for Group 4 facilities, as applicable, prior to making the change.

5) PSD applicability. If the PTE of PM or PM10 at the Group 3 facility is greater than or equal to 250 tons per year, the owner or operator shall comply with requirements specified in 567 IAC Chapter 33, as applicable. The owner or operator of a Group 3 facility that is a grain

terminal elevator shall include fugitive emissions, as "fugitive emissions" is defined in subrule 33.3(1), in the PTE calculation for determining PSD applicability.

6) Recordkeeping. The owner or operator shall keep the records of annual grain handled at the facility and annual PTE for PM and PM10 emissions on-site for a period of five years, and the records shall be made available to the department upon request.

d. Group 4 facilities. A facility qualifies as a Group 4 facility if the facility is a stationary source with a PTE equal to or greater than 100 tons of PM10 per year, as PTE is specified in subrule 22.10(2). For purposes of this paragraph, an "existing" Group 4 facility is one that commenced construction, modification or reconstruction before January 9, 2008. A "new" Group 4 facility is one that commenced construction, modification or reconstruction on or after January 9, 2008.

1) Air construction permit. The owner or operator of a Group 4 facility shall obtain the required construction permits as specified under subrule 22.1(1). The owner or operator of an "existing" facility shall provide the construction permit applications, as specified by subrule 22.1(3,) to the department on or before March 31, 2008. The owner or operator of a "new" facility shall obtain the required permits, as specified by subrule 22.1(1), from the department prior to initiating construction, modification or reconstruction of air emissions equipment.

2) Permit conditions. Construction permit conditions for a Group 4 facility shall include, but are not limited to, the following:

1. The owner or operator shall implement BMP, as specified in the permit, for controlling air pollution at the facility and for limiting fugitive dust at the facility from crossing the property line. If the department revises the BMP requirements for Group 4 facilities after a facility is issued a permit, the owner or operator of the Group 4 facility may request of the department that

the facility's permit be modified to incorporate the revised BMP requirements. The department will issue permit modifications to incorporate BMP revisions on a case-by-case basis.

2. The owner or operator shall retain all records as specified in the permit.

3) PSD applicability. If the PTE of PM or PM10 or at the facility is equal to or greater than 250 tons per year, the owner or operator shall comply with requirements specified in 567 IAC Chapter 33, as applicable. The owner or operator of a Group 4 facility that is a grain terminal elevator shall include fugitive emissions, as "fugitive emissions" is defined in subrule 33.3(1), in the PTE calculation for determining PSD applicability.

4) Recordkeeping. The owner or operator shall keep the records of annual grain handled at the facility and annual PTE for PM and PM10 emissions on-site for a period of five years, and the records shall be made available to the department upon request.

5) Operating permits. The owner or operator of a Group 4 facility shall apply for an operating permit for the facility if the facility's annual PTE for PM10 is equal to or greater than 100 tons per year as specified in rules 567—22.100(455B) through 567—22.300(455B). The owner or operator of a Group 4 facility that is a grain terminal elevator shall include fugitive emissions in the calculations to determine if the PTE for PM10 is greater than or equal to 100 tons per year. The owner or operator also shall submit annual emissions inventories and fees, as specified in rule 567—22.106(455B).

22.10(4) Feed mills. The requirements for construction permits, operating permits, and emissions inventories for a feed mill that is located at a country grain elevator, as "feed mill" is defined in subrule 22.10(1), are set forth in this subrule. For purposes of this subrule, an "existing" feed mill is one that commenced construction, modification or reconstruction before

January 9, 2008. A "new" feed mill is one that commenced construction, modification or reconstruction on or after January 9, 2008.

a. Air construction permit. The owner or operator of a feed mill shall obtain an air construction permit as specified under subrule 22.1(1) for each piece of equipment at the feed mill that emits a regulated air pollutant. The owner or operator of an "existing" feed mill shall provide the appropriate permit applications to the department on or before March 31, 2008. The owner or operator of a "new" feed mill shall provide the appropriate permit applications to the department prior to initiating construction, modification or reconstruction of air emissions equipment.

b. Emissions inventory. The owner or operator shall submit an emissions inventory for the feed mill for all regulated air pollutants as specified under subrule 21.1(3).

c. Operating permits. For a feed mill with a PTE equal to or greater than 100 tons of PM10 per year, as PTE is specified in subrule 22.10(2), the owner or operator shall apply for an operating permit as specified in rules 567—22.100(455B) through 567—22.300(455B). The owner or operator shall sum the PTE of the equipment at the feed mill with the PTE of the equipment at the country grain elevator to determine if operating permit requirements specified in rules 567—22.100(455B) through 567—22.300(455B) apply to the source. The owner or operator also shall begin submitting annual emissions inventories and fees, as specified under rule 567—22.106(455B).

d. PSD applicability. If the PTE of PM or PM10 at the feed mill is equal to or greater than 250 tons per year, the owner or operator shall comply with requirements for PSD specified in 567—Chapter 33, as applicable. For purposes of determining whether the source is subject to the Prevention of Significant Deterioration (PSD) requirements set forth in 567—Chapter 33, the

owner or operator shall sum the PTE of the equipment at the feed mill with the PTE of the equipment at the country grain elevator.

ITEM 6. Amend rule **567—22.100(455B)**, the definition for "country grain elevator," as follows:

"Country grain elevator" ~~means any grain elevator that receives more than 50 percent of its grain, as defined by 40 CFR 60.301(a) as amended through August 3, 1978, produced by farms in the vicinity. This definition does not include grain terminal elevators or pertain to grain storage elevators, as defined in paragraph 23.1(2)"ooo."~~ shall mean the definition of "country grain elevator" set forth in subrule 22.10(1).

ITEM 7. Amend rule **567—22.100(455B)**, the definition for "potential to emit," **first** and **second paragraphs**, as follows:

"Potential to emit" means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is enforceable by the administrator. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in Title IV of the Act or the regulations relating to acid rain.

For the purpose of determining potential to emit for country grain elevators, ~~"maximum capacity" means the greatest amount of grain received by the elevator during one year of the previous five-year period, multiplied by an adjustment factor of 1.2. If the source is subject to new source construction permit review, then potential to emit is defined as stated above or as~~

~~established in a federally enforceable permit.~~ the provisions set forth in subrule 22.10(2) shall apply.

ITEM 8. Amend subrule 23.4(7) as follows:

Grain handling and processing plants. No person shall cause, allow or permit the operation of equipment, excluding bin vents at country grain elevators, at a permanent installation for the handling or processing of grain, grain products and grain by-products such that the particulate matter discharged to the atmosphere exceeds 0.1 grain per dry standard cubic foot of exhaust gas. The particulate matter discharged to the atmosphere from a bin vent at a country grain elevator shall not exceed 1.0 grain per dry standard cubic foot of exhaust gas.

_____
Date

_____
Richard A. Leopold, Director

Administrative Rule Fiscal Impact Statement

Date: 7-9-07

Agency: Department of Natural Resources
IAC Citation: 567 IAC
Agency Contact: Anne Preziosi

Summary of the Rule: The purpose of the proposed rule changes is to establish new air quality rules for grain elevators The proposed rulemaking adds new rule 567—22.10(455B) with special requirements for these facilities. The proposed rule defines each type of facility, and also specifies for each type of facility the permitting options, emissions calculation methodology, emissions reporting and record keeping, and best management practices for controlling air pollution. A new particulate matter emission standard will also be established for bin vents located at country grain elevators through amendments to subrule 23.4(7).

Fill in this box if the impact meets these criteria:

_X_ No Fiscal Impact to the State.
___ Fiscal Impact of less than $100,000 annually or $500,000 over 5 years.
___ Fiscal Impact cannot be determined.

Brief Explanation:
Rule changes will not affect expenditures or revenues to the state.

Fill in the form below if the impact does not fit the criteria above:

___ Fiscal Impact of $100,000 annually or $500,000 over 5 years.

* Fill in the rest of the Fiscal Impact Statement form.

Assumptions:

Describe how estimates were derived:

Estimated Impact to the State by Fiscal Year

	Year 1 (FY)	Year 2 (FY)
Revenue by Each Source:		
GENERAL FUND		
FEDERAL FUNDS		
Other (specify)		
TOTAL REVENUE		
Expenditures:		
GENERAL FUND		
FEDERAL FUNDS		
Other (specify)		
TOTAL EXPENDITURES		
NET IMPACT		

_X_ This rule is required by State law or Federal mandate.
Please identify the state or federal law:
Iowa Code section 455B.133, as implemented in 567 IAC Chapters 20, 22, and 23, and Clean Air Act sections 111, and 502(a), and part C of Title I, as codified in 40 Code of Federal Regulations Parts 51, 60, and 70.

___ Funding has been provided for the rule change.
Please identify the amount provided and the funding source:

_X_ Funding has not been provided for the rule.
Please explain how the agency will pay for the rule change:
The agency will not need additional revenue to implement this rule.

Fiscal impact to persons affected by the rule:

The rule changes will primarily affect owners and operators of grain elevators, which includes country grain elevators, grain terminal elevators, and "other" grain elevators as defined in the proposed rule. Based on previous information obtained from this source sector, the Department estimates that at least 838 existing grain elevators state-wide could be impacted by these rule changes.

Permitting and Emissions Inventory
All grain elevator owners or operators will be required to complete and submit a Group 1 registration, a Group 2 permit application, or a standard air construction permit application depending on the level of potential emissions from the facility. A little over 700 existing grain elevators will be eligible to use the one-page registration. Approximately 70 existing grain elevators will be eligible to use the Group 2 permit application. Both the Group 1 registration and Group 2 permit application will require owners or operators to provide basic identification information and to calculate their potential emissions. The Department estimates that approximately four (4) hours will be needed to complete either the Group 1 registration letter or the Group 2 permit application (including emissions calculations). Assuming staff costs of $30/hour, this equates to $120 per facility.

Approximately 20 owners or operators of existing grain elevators may need to complete an air construction permit application, which would include emissions calculations. This will likely require the services of a consultant and could also require the completion of computer air dispersion modeling. The Department estimates that the cost for completing and submitting an air construction permit application could range from $5,000 to $20,000 per facility, depending on the size of the facility and the amount of computer dispersion modeling needed. Owners or operators of grain elevators that meet the definition of a major source under Title V (fewer than five facilities) would also be required to obtain a Title V operating permit. The Department estimates that the cost for a consultant to complete a Title V operating permit application could range from $10,000 to $25,000 per facility. It should be noted that grain elevators that can be classified as a small business, as defined in the Clean Air Act, will be able to use the free services of the Iowa Air Emissions Assistance Program located within the Iowa Waste Reduction Center at UNI to obtain assistance in completing air construction permit applications.

As mentioned above, all grain elevator owners and operators will be required to calculate their potential to emit (PTE) to determine which air construction permitting requirements apply to them. Owners or operators of approximately 100 of these facilities will also be required to report their annual emissions to the Department either annually or once every three years. The Department has worked with the Agri-business Association of Iowa (AAI) and the Iowa Air Emissions Assistance Program at the Iowa Waste Reduction Center of UNI to create emissions calculation software that will simplify and automate this process at all grain elevators. The software and training on how to use it will be provided at no cost to grain elevator owners and operators. The software will also allow for streamlined emissions reporting and recordkeeping at each facility, further minimizing the fiscal impact of performing emissions calculations.

Best Management Practices
All grain elevator owners and operators will be required to implement Best Management Practices (BMP) to minimize the impact of particulate matter emissions from the facility and comply with the fugitive dust requirements of 567 IAC 23.3(2)"c." BMP requirements will depend on the level of emissions from the facility. Estimates of the BMP cost by PTE group are as follows:

Group 1 (PTE < 15 tons/yr): A little over 700 existing grain elevators will fall into this group. BMP provided in the Department's "Best Management Practices (BMP) for Grain Elevators" will be required to be implemented as applicable at each grain elevator. BMP requires owners or operators of existing grain elevators to continue to implement any good housekeeping practices or procedures already in place and to continue to maintain and operate equipment that reduces air emissions. BMP requires some minimal recordkeeping to demonstrate that practices and procedures are continued and equipment is being maintained and operated properly.
(Fiscal impact to persons affected by the rule is continued on the next page.)

Fiscal impact to persons affected by the rule (cont.):

Based on these considerations, the Department estimates that the additional costs to a typical Group 1 grain elevator owner or operator to implement BMP will be negligible.

Group 2 (PTE ≥15 and ≤ 50): Owners or operators at approximately 70 existing grain elevators will be required to use oiling or an equivalent method that results in the same facility wide reduction in PM10 emissions, in addition to the basic BMP specified for Group 1. Assuming grain oiling is selected, the cost would be approximately $60,000 per facility to purchase and install a grain oiling system. On-going annual operating costs are estimated not to exceed $10,500 at each facility.

It is difficult to estimate the cost of purchasing and installing an equivalent method due to unknowns such as which PM10 emissions units would be selected for control and the amount of PM10 emissions reductions necessary to attain the same reduction realized through grain oiling. PM10 emissions units that could be selected include receiving pits and loadout spouts. Costs to control PM10 emissions from these units are estimated to range between $90,000 to $225,000 per emissions unit, depending on the control method selected. These estimates do not include on-going annual operating costs.

Groups 3 and 4 (PTE > 50): Approximately 20 grain elevators fall into these groups. Existing emissions units at grain elevators in these groups will be reviewed as part of the construction permit process to ensure that applicable emission limits can be achieved and air quality standards are attained. The results of these reviews may require that air pollution controls be installed, in addition to implementation of the basic grain elevator BMP. Equipment emissions testing and on-going recordkeeping related to the operation of the equipment may also be required. The costs to purchase and install air pollution control equipment will depend on the number of emissions units that require control and the degree to which they need to be controlled. Typical controls might include a mix of filters on bin vents, grain oiling, and enclosures, aspiration systems and bag filters for receiving pits and loadout spouts. The Department estimates that costs could range from $180,000 to $5 million facility-wide. One time testing of emissions from some or all of this equipment is estimated to range in cost from $50,000 to $100,000 facility-wide.

Fiscal impact to Counties or other Local Governments (required by Iowa Code 25B.6):

No impact. There are no municipally owned or operated grain elevators. There will also be no impact to the local air quality programs in Linn or Polk counties since all grain elevators in both of these counties have already been permitted.

* If additional explanation is needed, please attach extra pages.

Agency Representative preparing estimate: Jim McGraw
Telephone Number: 515-242-5167